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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,533	07/23/2003	Jon H. Krueger	P16541	6656

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EXAMINER

HOMAYOUNMEHR, FARID

ART UNIT	PAPER NUMBER
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2132

DATE MAILED: 08/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/624,533

Applicant(s)

KRUEGER ET AL.

Examiner

Farid Homayounmehr

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



KAMBIZ ZAND
PRIMARY EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date multiple.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claims **1-40** have been examined.

Information Disclosure Statement PTO-1449

1. The Information Disclosure Statement submitted by applicant on 3/13/2006, 2/2/2005, and 7/23/2003 has been considered. Please see attached PTO-1449.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-24 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. Independent claims 1 and 14 are directed to an Apparatus, which produces no tangible result, and therefore lacks utility. Claims 25-40 establish a tangible result of data retrieval, but claims 1-24 fail to do the same.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5.1. Claims 1 and 14 recite the limitation "the first array". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Douceur (U.S. Patent No. 6,067,547, dated May 23, 2000).

7.1. As per claim 25, Douceur is directed to a data retrieval method (column 9 lines 55-60), comprising: responsive to input data, generating an index value and a signature value through a hash function, retrieving a first data unit using the index value, comparing signature values in the first data unit to the generated signature value (column 3 line 50 to column 4 line 45 describes how a hash of input data is generated from input data, and how the hash is used locate a pointer to where the data record corresponding to the input signal is identified by searching for a match with a key.

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Column 4 lines 21 to 28 discloses splitting the hash into an index and a signature), if a match occurs, retrieving a second data unit using the index value and a position of the signature value (column 1 line 35 to column 2 line 37).

7.2. As per claim 26, Douceur is directed to the data retrieval method of claim 25, further comprising comparing the input data to a portion of data in the second data unit and, if they match, outputting a second portion of the data unit (column 1 line 60 to column 2 line 39. The second portion of the data unit is the other data fields in the record corresponding to the key).

7.3. As per claim 27 Douceur is directed to the data retrieval method of claim 26, further comprising, if the input data and the data portion do not match, outputting an indication that the input data misses the memory (column 2 line 25-39).

7.4. As per claim 28, Douceur is directed to the data retrieval method of claim 25, further comprising, if the generated signature does not match any signature in the first data unit, allocating a new entry to the input data and storing the generated signature in an unoccupied position of the first data unit (claim limitation describes the process of insertion in a database equipped with hash table search mechanism as described in column 3 line 30 to 57).

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7.5. As per claim 29, Douceur is directed to the data retrieval method of claim 25, wherein the index value and signature value each are selected from non-overlapping portions of a common hash value (column 4 line 25-27).

7.6. As per claims 30 to 32, Douceur is directed to the data retrieval method of claim 25, wherein the input data is IP source and destination addresses and TCP source and destination port designators and the IP address is either 32 or 128 bit long (Douceur method has no limitation on type and length of data that is input to the system).

7.7. Claims 33 to 40 are substantially the same as claims 25-32 above, with the added requirement of generating multiple index values in claim 33, as opposed to one index value in claim 25. Douceur column 18, lines 10-35 and Fig. 13 are directed to generation of multiple index values and then performing the search the same way as it is outlined in claims 25-32.


7.8. Claims 1-24 are directed to a system that implements the methods of claims 25-40. Systems implementing a method of search using hash tables were widely used before the time of invention. Details such as use of SRAM or DRAM, or commingled memory arrays are pointed out in Douceur column 2, lines 40-65.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farid Homayounmehr whose telephone number is 571 272 3739. The examiner can normally be reached on 9 hrs Mon-Fri, off Monday biweekly.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KAMBIZ ZAND
PRIMARY EXAMINER

Farid Homayounmehr

Examiner

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